

Detailed Action

**DISTRIBUTION COMPARTMENTS FOR AN EFFICIENT AND FAILSAFE
TRAFFIC DISTRIBUTION IN A PACKET-SWITCHED NETWORK**

Response to Arguments/Remarks

1. Claims 10 – 12, 14 – 23, 25, and 27 – 29 are currently pending in the application and claims 10 and 12 are amended. Claims 1 – 9, 13, 24, 26 have been PREVIOUSLY CANCELLED; Claims 16, 20, 22 – 23, and 29 have been PREVIOUSLY PRESENTED.
2. Applicant submitted an Appeal Brief on 12/10/2009.
3. The Examiner reviewed the arguments of the case and consulted Applicant's attorney Jane Hood on 3/5/2009 to discuss the merits of the case. Applicant agreed to amend claims 12, 14, and 17 and cancel claims 10 – 11, 15, 18 – 19, 21, 25, and 27 – 28.

Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Janet Hood (Attorney No. 61,142) on March 5, 2010.

Amendment to the claims:

3. Please amend claim as follows:
Claims 1 – 9. (PREVIOUSLY CANCELLED):
Claims 10. (CANCELLED):
Claim 11. (CANCELLED):
Claim 12. (AMENDED) A method for defining a distribution fan-out for the distribution of traffic via different paths in a packet-based communication network formed by a plurality of

nodes and a plurality of connection sections for packet traffic having the same egress node, the method comprising:

defining for the communication network a node arrangement comprising a plurality of distinct node classes that encompasses all of the plurality of nodes of the communication network, wherein each respective one of the distinct node classes is distinguished from one another based on a number of hops required by each node in a given class to reach the egress node;

wherein the defining of the node arrangement comprises dividing all of the plurality of nodes into the plurality of distinct classes subject to satisfying a first condition and a second condition, wherein the first condition establishes for each node a path to the egress node which is measured in a minimum number of hops, and the second condition establishes no loop formation within each distinct class, the node classes are determined according to the minimum number of hops between the nodes and the egress node, whereby nodes with the same minimum number of hops belong to the same class; and

routing from each node of a class at least one link to a node of a class having one fewer hop,

wherein from each node of a class, a link is routed to a node of a class having wherein for at least one node of a class which is connected by a connection section to a node of the same class, at least one link between the node and a node of the same class is defined,

wherein, in the case of a node which is assigned to a class and which has one outgoing link, in the event of failure of said outgoing link:

for each logical link to the respective node that originates from a node having the same class as the respective node, the respective logical link is inverted, and

when no link to the respective node originates from a node having the same class, all logical links to the respective node are inverted to nodes of a class having one more hop.

Claims 13. (PREVIOUSLY CANCELLED):

Claim 14. (AMENDED) The method according to Claim 12, further comprising:

defining links on connection sections between nodes of a class, wherein said links being defined according to a ~~maximization~~ maximum of the least number of outgoing logical links for the node ~~or nodes of the class having the least number of outgoing links~~, and according to loop freedom in respect of the links between nodes of the class.

Claim 15. (CANCELLED)

Claims 16. (PREVIOUSLY PRESENTED):

Claim 17. (AMENDED) The method according to Claim ~~15~~, 14, wherein for nodes of the class, the nodes are sequenced according to the number of outgoing links and, when nodes have the same number of outgoing links, according to the capacity of the incoming links, and performing for at least some of the nodes, the following steps for each node depending on their sequence: identifying the shortest path from the node to the set of nodes of the class which is fewer by one, paths via outgoing links leading directly to nodes of the class N-1 being disregarded, and incorporating the link via the first connection section of the identified path into the distribution fan-out as a link, when an identified path does not lead to a loop within the nodes of the class.

Claim 18. (CANCELLED):

Claim 19. (CANCELLED):

Claims 20. (PREVIOUSLY PRESENTED):

Claim 21. (CANCELLED):

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Claims 22. (PREVIOUSLY PRESENTED):

Claims 23. (PREVIOUSLY PRESENTED):

Claims 22. (PREVIOUSLY CANCELLED):

Claim 25. (CANCELLED):

Claims 26. (PREVIOUSLY CANCELLED):

Claim 27. (CANCELLED):

Claim 28. (CANCELLED):

Claims 29. (PREVIOUSLY PRESENTED):

Allowable Subject Matter

4. In view of the Examiner's amendment, claims 12, 14, 16 – 17, 20, 22 – 23 and 29 are allowed

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HENRY BARON whose telephone number is (571)270-1748. The examiner can normally be reached on 7:30 AM to 5:00 PM E.S.T. Monday to Friday.
6. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. B./
Examiner, Art Unit 2462

HB

/Seema S. Rao/
Supervisory Patent Examiner, Art Unit 2462